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TRANSMITTAL FORM

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Total Number of Pages in This Submission

Application Number	10/628,110
Filing Date	28 July, 2003
First Named Inventor	Sergey Gazenko
Art Unit	1654
Examiner Name	Jennifer L. Harle
Attorney Docket Number	

ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input checked="" type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below): - Text of revised Patent application with drawings - additional information regarding Application
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Remarks Sent:
1. Letter for Expert (Answer) - 29 pages copy of 168-27
2. Revised text of application - 27 pages
3. Additional information - 15 pages / 71 pages

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name			
Signature			
Printed name	Sergey Gazenko		
Date	03 February, 2005	Reg. No.	

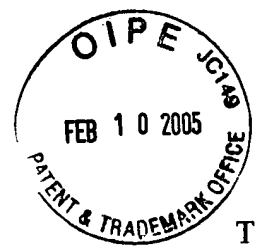
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Signature			
Typed or printed name	Sergey Gazenko	Date	03 Feb. 2005

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To: Mrs. Jennifer I Harle, Patent Examiner
Art Unit 1654, US PTO

From: Sergey Gazenko, Patent Applicant,
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Re: Reply to the Office Action mailed on 11/09/2004. Patent Application No. 10/628,110.

Dear Mrs. Harle,

Thank you for your detailed message regarding my Patent Application and for your very valuable advice.

Below is my answer to your letter.

1. I agree with you that the priority date for the current application is 28 July 2003.
2. The drawings are amended. Four new drawing have been added in order to make the patent application more understandable per your recommendations. Figures 2, 3, 5 and 6 have been added. Figures 1 and 4 have been improved: Fig. 1 has added shadows and Fig. 4 has an additional view of the device in order to explain the general design of the SDU better.
3. The abstract and specification sections are revised and written in proper English. The specification section is corrected according to 37 CFR 1.77 (b), 37 CFR 1.72 (a), 37 CFR 1.78 and other regulations.
4. The Background of the Invention has been changed according to Examiner recommendations: Field of the Invention and Background art has been added.
5. The article that you found on the Internet website www.BioTK.com, with information about MCA technology, was placed on the site much later than the current patent application was sent to USPTO. The statement regarding the patenting of basic ideas of the MCA was placed by error by the editor and owner of this site.
6. Unclear, inexact or verbose terms were clarified, explained or changed where it was possible. All abbreviations were explained. I've added text in many places in order to explain my invention, and added and amended pictures. Additional text is allocated in italics for your convenience. In two places I removed sentences that were poorly written. I allocated these sentences in square brackets [such as this] for your convenience. No new matters were added to the text. I am also enclosing a fully revised application without the allocations.
7. Subchapters "Field of the Invention" and "Description of the related Art" and three examples of the invented method were added. A short chapter, "Brief Description of the Several views of the Drawings" was also added. An explanation for these figures can be found in other chapters as well.

8. The claims were revised in order to conform to rules, and make them more readable and clear. Only four claims remain with this invention.

9. This invention describes an entirely new method for reducing the time of microbiological analysis based on trapping single cells and growing micro-colonies in a long cylinder form within channels of a micro-channel plate. It doesn't have analogs because technical opportunities for realization of this idea appeared only a few years ago in a completely different scientific area – optoelectronics. Modern microbiological diagnostics has a way of analyzing single cells without growth (e.g. Flow Cytometry, PCR, Epifluorescence, ATP and Chemiluminescence) however these methods are expensive, introduce possibilities of error, and require expert training. Prior to this invention, it was believed that rapid growth of this magnitude was impossible. This invention gives a solution for the reduction of growth time and is simultaneously cost-effective, reliable, and simplistic. This invention requires the modification of a high-tech optoelectronic device according to my specifications. My invention consists of micro-channels in a glass plate. The micro-channels are always short, parallel, never merge, are isolated from each other, and can only be manufactured from a special glass. Each micro-channel is a chamber for growth and color reaction. This method and device has nothing in common with micro-fluidic devices. The micro-channels of micro-fluidic devices serve for transportation of cells and substances from one reaction chamber to another. In micro-fluidic devices, micro-channels merge and separate, have different lengths, deepness and diameters inside one device and are manufactured from plastics. The patents of Vo-Dihn, Quake et al. and O'Connor are devoted to different kinds of micro-fluidic devices. None anticipate my invention. I can give a detailed description for each of these patents in comparison with my method and device if you require.

10. A working model of this device has been created and the method tested with different variants. I am enclosing some materials and pictures regarding my research and ideas. This method and device is ready for commercialization, therefore I am respectfully asking for your attention to this invention. I would be happy to visit you in order to demonstrate the method and device, discuss possible problems, and answer any questions. I hope that this can save time during the patenting process.

Thank you again for your advice and helpful information.

Sincerely,


Sergey Gazenko, Ph.D.

January 30, 2005